

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1, 4, 6-11, 13, 15-21 and 23-31 are currently pending. Claims 1, 4, 6, 11, 13, 15, 17, 18, 21, 23, 25 and 26 have been amended. Claims 2, 3, 5, 12, 14, and 22 have been cancelled. Claims 27-31 are new.

Initially, the undersigned would like to thank the Examiner for the indication in the Official Action that the drawings have been accepted, that the claim for priority and certified copies of the priority documents have been received and that the Information Disclosure Statement filed on October 26, 2005 has been considered and the documents cited therein made of record.

Claims 6, 15 and 23 stand objected to for use of a comma in place of a decimal point. By way of the foregoing amendments, claims 6, 15 and 23 have been amended to address this objection.

Claims 1-26 stand rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. By way of the foregoing amendments, each of the independent claims have been amended to recite the display of pixel values on a screen as suggested by the Examiner. Accordingly, reconsideration and withdrawal of this ground of rejection are respectfully requested.

Claims 1-2, and 8-10 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Leather (U.S. Patent No. 6,999,100). Additionally, claims 4-7, 11, 12-16, 17-18 and 21-25 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Leather in view of Nelson (U.S. Patent No. 6,636,218). Although the undersigned disagrees with these grounds of rejections, each of the independent claims have been amended to include the subject matter of dependent claims 2 and 3, thereby rendering these grounds of rejection moot.

Claim 3 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Leather in view of Ramani (U.S. Patent No. 6,731,300). Prior to discussing this ground of rejection in detail, a brief summary of sampling patterns,

methods for creating sampling patterns and the like according to exemplary embodiments is provided below in order to highlight some of the advantageous characteristics thereof.

According to exemplary embodiments of the present invention, methods and apparatuses for producing high quality, anti-aliased pictures at relatively low computational costs are achieved by providing a sampling pattern wherein each pixel has a pattern of sample points at the edges of the pixel and the sample point pattern of each pixel is a mirror image of, and different from, the pattern of a directly neighboring pixel. According to an exemplary embodiment, the mirror planes are located on the edges of the pixel and the pattern has one sample point per pixel mirror plane. Note, for example, the illustrations provided in Figure 2a and 2b which provide two examples of sample patterns according to these exemplary embodiments.

As correctly recognized in the Official Action, the Leather patent fails to teach or suggest the provision of a pattern that has one sample point per pixel mirror plane. Thus, the Official Action relies upon the Ramani patent to allegedly remedy this deficiency of Leather.

However, it is respectfully submitted that Ramani also fails to teach or suggest a sample pattern that has one sample point per pixel mirror plane, wherein the mirror planes are located on the edges of the pixel. The Official Action refers to Figure 13 of the Ramani patent and the corresponding text found at column 11, lines 50-62 thereof. While it appears at first glance, that Figure 13 of Ramani depicts a number of pixels that have one sample per pixel, that is not actually the case. Instead, Figure 13 illustrates a candidate render bin which represents one pixel. Thus, Figure 13 of Ramani illustrates a sample pattern wherein 16 samples are provided for a single pixel, and none of the samples are disposed on the edge of the pixel. Accordingly, it is respectfully submitted that this teaching of Ramani cannot reasonably be said to teach or suggest the provision of "one sample point per pixel mirror plane wherein the mirror planes are located on the edges of the pixel."

Figure 12 of Ramani illustrates another sampling pattern wherein four samples are provided on the left most edge of a pixel and four samples are provided

on the top most edge of a pixel. However, this teaching of Ramani also fails to suggest the claimed combinations which recite, among other things, a pattern having one sample point per pixel mirror plane wherein the mirror planes are located on the edges of the pixel. Neither of these teachings of Ramani would have motivated one of ordinary skill in the art to have arrived at Applicants' claimed combinations.

Accordingly, it is respectfully requested that the rejection of the claims under 35 U.S.C. § 103 over Leather in view of Ramani be reconsidered and withdrawn.

New claims 27 and 29 further specify that the sampling pattern has one and only one sample point per pixel mirror plane. It is also respectfully submitted that this feature is not taught or suggested by any of the cited documents whether taken singly or in combination.

All of the objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that this application is in condition for allowance and a notice to that effect is earnestly solicited. Should the Examiner have any questions regarding this response or the application in general, he is invited to contact the undersigned at (540) 361-1863.

Respectfully submitted,

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